

Title (en)

METHOD FOR IMPROVING AFFINITY OF ANTI-CYTOKINE ANTIBODY FOR ANTIGEN, METHOD FOR PRODUCING ANTI-CYTOKINE ANTIBODY, AND ANTI-CYTOKINE ANTIBODY

Title (de)

VERFAHREN ZUR VERBESSERUNG DER AFFINITÄT EINES ANTI-ZYTOKIN-ANTIKÖRPERS FÜR ANTIGEN, VERFAHREN ZUR HERSTELLUNG EINES ANTI-ZYTOKIN-ANTIKÖRPERS UND ANTI-ZYTOKIN-ANTIKÖRPER

Title (fr)

PROCÉDÉ D'AMÉLIORATION DE L'AFFINITÉ D'UN ANTICORPS ANTI-CYTOKINE POUR UN ANTIGÈNE, PROCÉDÉ DE PRODUCTION D'UN ANTICORPS ANTI-CYTOKINE ET ANTICORPS ANTI-CYTOKINE

Publication

EP 4151651 A1 20230322 (EN)

Application

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Priority

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Abstract (en)

Disclosed is a method for improving an affinity of an anti-cytokine antibody for an antigen, the method comprising: in an anti-cytokine antibody whose electrical characteristic of complementarity determining regions (CDRs) is negatively charged, changing at least 3 amino acid residues of light chain framework region 3 to arginine residues or lysine residues, thereby improving an affinity for an antigen as compared with that of an antibody before the at least 3 amino acid residues are changed to arginine residues or lysine residues, wherein the at least 3 amino acid residues comprise residues at least 3 positions selected from the group consisting of positions 63, 65, 67, 70 and 72 of a light chain defined by Chothia method.

IPC 8 full level

C07K 16/24 (2006.01)

CPC (source: CN EP US)

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C07K 2317/565 (2013.01 - CN EP US); **C07K 2317/567** (2013.01 - CN EP); **C07K 2317/92** (2013.01 - CN EP US)

Citation (applicant)

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Citation (search report)

- [I] EP 3342783 A1 20180704 - SYSMEX CORP [JP]
- [A] EP 3854808 A1 20210728 - SYSMEX CORP [JP]
- [A] FUKUNAGA ATSUSHI ET AL: "Improvement of antibody affinity by introduction of basic amino acid residues into the framework region", BIOCHEMISTRY AND BIOPHYSICS REPORTS, vol. 15, 1 September 2018 (2018-09-01), pages 81 - 85, XP055828390, ISSN: 2405-5808, DOI: 10.1016/j.bbrep.2018.07.005
- [A] A. FUKUNAGA ET AL: "Improving the affinity of an antibody for its antigen via long-range electrostatic interactions", PROTEIN ENGINEERING, DESIGN AND SELECTION, vol. 26, no. 12, 7 November 2013 (2013-11-07), GB, pages 773 - 780, XP055473804, ISSN: 1741-0126, DOI: 10.1093/protein/gzt053

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

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